

What is claimed is:

1. A microemulsion composition for use as an adjuvant with agrochemicals, consisting essentially of an oil, a hydrophilic emulsifier, a lipophilic co-emulsifier and water.

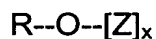
2. The composition of claim 1 wherein the oil phase component comprises a fatty acid ester.

3. The composition of claim 2 wherein the oil phase component is selected from the group consisting of methyl oleate and methyl laurate.

4. The composition of claim 1 wherein the oil phase component is selected from the group consisting of mineral oils, vegetable oils, paraffinic oils and silicone oils.

5. The composition of claim 1 wherein the hydrophilic emulsifier comprises an alkyl polyglycoside.

6. The composition of claim 1 wherein the hydrophilic emulsifier comprises an alkyl(oligo)glycoside corresponding to the formula:



in which R is an alkyl group containing 8 to 22 carbon atoms, Z is a sugar unit containing 5 or 6 carbon atoms and x is a number from 1 to 10.

7. The composition of claim 1 wherein the lipophilic co-emulsifier is selected from the group consisting of glycerol esters and sorbitan esters possessing 6 to 22 carbon atoms.

8. The composition of claim 7 wherein the lipophilic co-emulsifier is selected from the group consisting of glycerol monooleate and sorbitan monolaurate.

9. The composition of claim 1 wherein the ratio by weight of hydrophilic emulsifier to the combined amount of hydrophilic emulsifier and lipophilic co-emulsifier ranges from 0.60 to 0.80.

5 10. The composition of claim 1 wherein the agrochemical is selected from the group consisting of pesticides, herbicides, algicides, fungicides, bactericides, viricides, insecticides, aphicides, miticides, nematocides, molluscicides, plant growth regulators, fertilizers, nutrients, gametocides, defoliants, desiccants, pest repellants, synergists, herbicide safeners, salt
10 additives, preservatives, and mixtures thereof.

11. The composition of claim 1 wherein the agrochemical comprises a glyphosate herbicide.

15 12. The composition of claim 1 further comprising an agent selected from the group consisting of antifreeze agents, dyes, thickening agents, antifoam agents and inorganic salts.

20 13. A method for treating plants with an agrochemical comprising spraying the agrochemical in combination with the composition of claim 1.

14. A microemulsion composition for use as an adjuvant in combination with an agrochemical, the microemulsion comprising:
25 (a) from about 5% to about 50% of an oil phase component,
 (b) from about 2% to about 20% of a hydrophilic emulsifier,
 (c) from about 2% to about 15% of a lipophilic co-emulsifier,
 (d) from about 10% to about 90% water.

30 15. The composition of claim 14 wherein the oil phase component comprises a fatty acid ester.

16. The composition of claim 15 wherein the oil phase component is selected from the group consisting of methyl oleate and methyl laurate.

17. The composition of claim 14 wherein the oil phase component is selected from the group consisting of mineral oils, vegetable oils, paraffinic oils and silicone oils.

19. The composition of claim 14 wherein the hydrophilic emulsifier comprises an alkyl(oligo)glycoside corresponding to the formula:

in which R is an alkyl group containing 8 to 22 carbon atoms, Z is a sugar unit containing 5 or 6 carbon atoms and x is a number from 1 to 10.

21. The composition of claim 20 wherein the lipophilic co-emulsifier is selected from the group consisting of glycerol monooleate and sorbitan monolaurate.

23. The composition of claim 14 wherein the agrochemical is selected from the group consisting of pesticides, herbicides, algicides, fungicides, bactericides, viricides, insecticides, aphicides, miticides, nematocides, molluscicides, plant growth regulators, fertilizers and nutrients, gametocides, defoliants, desiccants, pest repellants, synergists, herbicide safeners, salt additives, preservatives, and mixtures thereof.

24. The composition of claim 14 wherein the agrochemical comprises a glyphosate herbicide.

25. The composition of claim 14 further comprising an agent selected
5 from the group consisting of antifreeze agents, dyes, thickening agents, antifoam agents and inorganic salts.

26. A method for treating plants with an agrochemical comprising spraying the agrochemical in combination with the composition of claim 14.
10

27. A method for the production of ready-to-use preparations containing agrochemicals comprising mixing a microemulsion consisting essentially of an oil, a hydrophilic emulsifier, a lipophilic co-emulsifier and water with an agrochemical.
15

28. The method of claim 27 wherein the oil phase component comprises a fatty acid ester.

29. The method of claim 28 wherein the oil phase component is
20 selected from the group consisting of methyl oleate and methyl laurate.

30. The method of claim 27 wherein the oil phase component is selected from the group consisting of mineral oils, vegetable oils, paraffinic oils and silicone oils.
25

31. The method of claim 27 wherein the hydrophilic emulsifier comprises an alkyl polyglycoside.

32. The method of claim 27 wherein the hydrophilic emulsifier
30 comprises an alkyl(oligo)glycoside corresponding to the formula:



in which R is an alkyl group containing 8 to 22 carbon atoms, Z is a sugar unit containing 5 or 6 carbon atoms and x is a number from 1 to 10.

33. The method of claim 27 wherein the lipophilic co-emulsifier is selected from the group consisting of glycerol esters and sorbitan esters possessing 6 to 22 carbon atoms.

5 34. The method of claim 33 wherein the lipophilic co-emulsifier is selected from the group consisting of glycerol monooleate and sorbitan monolaurate.

10 35. The method of claim 27 wherein the ratio by weight of hydrophilic emulsifier to the combined amount of hydrophilic emulsifier and lipophilic co-emulsifier ranges from 0.60 to 0.80.

15 36. The method of claim 27 wherein the agrochemical is selected from the group consisting of pesticides, herbicides, algicides, fungicides, bactericides, viricides, insecticides, aphicides, miticides, nematocides, molluscicides, plant growth regulators, fertilizers, nutrients, gametocides, defoliants, desiccants, pest repellants, synergists, herbicide safeners, salt additives, preservatives, and mixtures thereof.

20 37. The method of claim 27 wherein the agrochemical comprises a glyphosate herbicide.

25 38. The method of claim 27 further comprising an agent selected from the group consisting of antifreeze agents, dyes, thickening agents, antifoam agents and inorganic salts.